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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,810	03/22/2001	Ronald H. Clark	18180.0142	3104

23517 7590 02/27/2003

SWIDLER BERLIN SHEREFF FRIEDMAN, LLP
3000 K STREET, NW
BOX IP
WASHINGTON, DC 20007

EXAMINER

ASSOUAD, PATRICK J

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,810

Applicant(s)

CLARK, RONALD H.

Examiner

Patrick J Assouad

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 7, 8, 10, 12, 14, 22 and 25-36 is/are rejected.
- 7) ☒ Claim(s) 2-6, 9, 11, 13, 15-21, 23, 24 and 37-39 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: there are numerous blanks on pg. 1. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 10 recites the limitation "the GPS navigation message" in line 22. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 7-8, 12, 14, 22, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Robbins et al.** ('876) in view of **Dwyer** ('953 B1).
6. **Robbins et al.** disclose an antenna self-test system for "airborne electronic systems" (col.1) and "while the airplane is in flight" (col. 2). Fig. 2 of **Robbins et al.** is reproduced below and clearly shows the on-board transmitter, receiver and processor for "verifying the integrity of the transmitted signal".

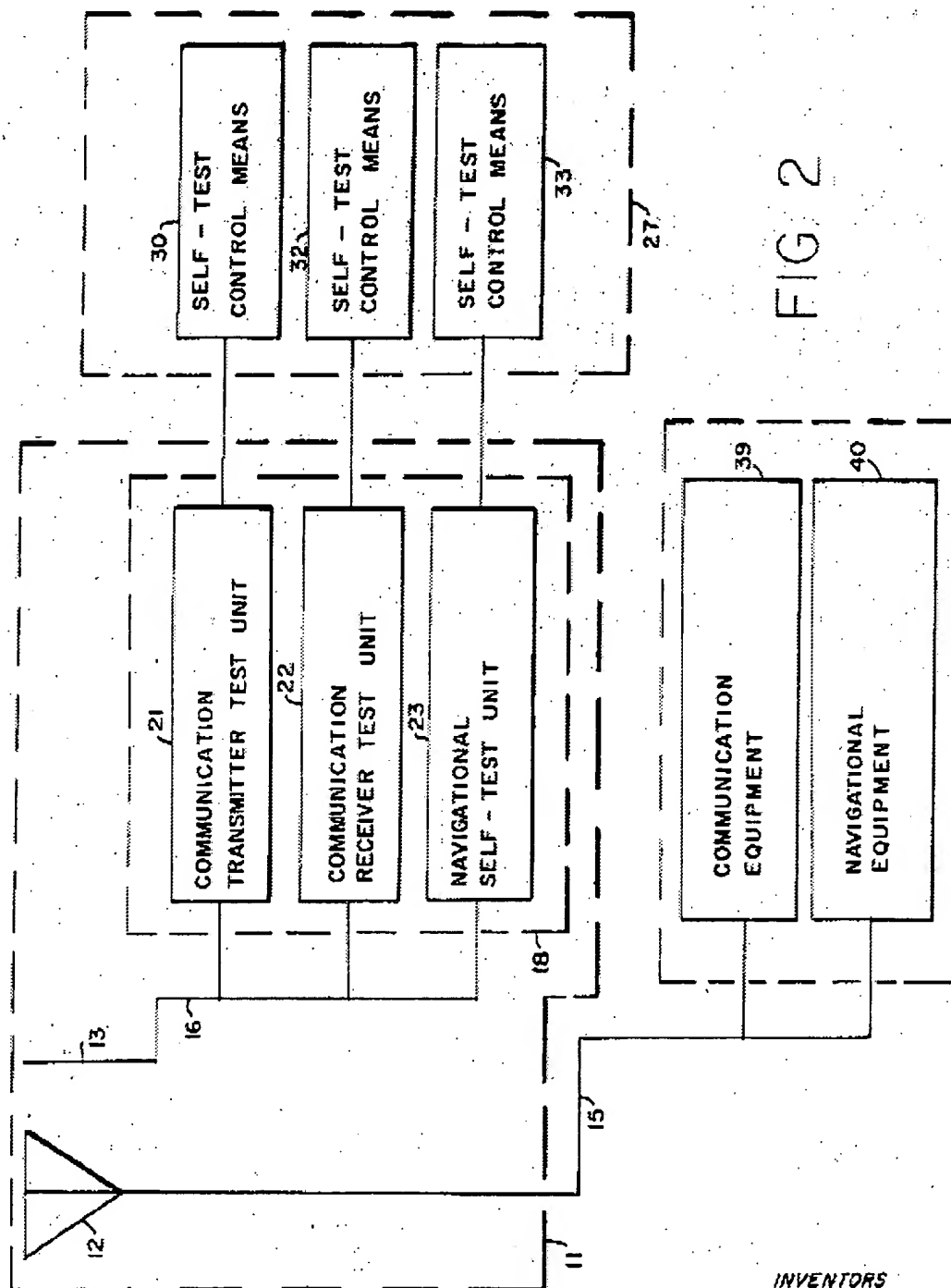


FIG. 2

INVENTORS

ROBERT ROBBINS
ARTHUR R. WHITTY
LOUIS J. KACHAVOS,

BY

ATTORNEY

Art Unit: 2857

7. The difference between the instant claimed invention and that of **Robbins et al.** lies in the claimed "space vehicle". **Robbins et al.** is concerned primarily but not exclusively with "aircraft"; however, they also teach that their system may be applied "to any system which transmits and/or receives a signal from an antenna".

8. **Dwyer** teaches a method and apparatus for on-board testing of a communication satellite. They teach us that there is a significant need for testing satellites or "space vehicles" -- as applicant calls them -- that are "in orbit" (col. 1).

9. It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the self-test system and method of **Robbins et al.** to "in orbit" satellites as taught by **Dwyer** because a complete and accurate measurement of orbital or in-flight capabilities allows ground operators to verify real-time functionality, and also avoids costly weight additions to support pure ground testing procedures. See at least the background of **Dwyer** for further motivation.

Allowable Subject Matter

10. Claims 2-6,9-11,13,15-21,23-24,28,37-39 are allowable over the prior art of record.

11. Claims 2-6,9,11,13,15-21,23,24 and 37-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2857

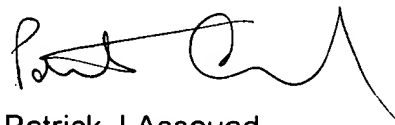
Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the attached PTO-892.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J Assouad whose telephone number is 703-305-3811. The examiner can normally be reached on Tuesday-Friday, 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 703-308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Patrick J Assouad
Primary Examiner
Art Unit 2857

pja
February 21, 2003